



CONSTRUCTION ENVIRONMENTAL HEALTH & SAFETY EXHIBIT

SCAFFOLDING

I. Definitions

- A. Scaffold: Any temporary elevated platform (supported or suspended) and its supporting structure (including points of anchorage), used for supporting materials or employees or both. The term scaffold includes mast-climbing scaffolds.

II. General Requirements

- A. All scaffold work and practices shall, at a minimum, comply with OSHA 29CFR Part 1926.450 through 1926.452, and 1926.454, including all appendices, the requirements outlined in this Standard, and the manufacturer's recommendations and requirements.
- B. Each Contractor requiring employees to erect, dismantle, adjust, or work on or from scaffolds is required to have a scaffold safety program, specific to that Contractor's operations, which meets or exceeds the guidelines listed in this Standard. This program shall be part of the Contractor's HASP.
- C. Plans, drawings, and procedures for scaffold erection and dismantling along with hazard analysis shall be kept on file at the jobsite and submitted to HUEHS for review. Due regard for predominant weather conditions and subsurface conditions will be considered for plan.
- D. Each employer's Competent Person shall ensure that all Employees potentially exposed to hazards associated with scaffolds possess the knowledge and skill required to perform the duties for which they are assigned. In addition, a hazard analysis shall be completed prior to any operation, hazards shall be clearly identified, and hazard controls defined. The hazard analysis shall be documented and reviewed with all members of the work crew.
- E. Fall protection requirements for scaffolds are outlined in the HUEHS Construction Fall Prevention and Protection Exhibit. **Note:** Fall protection is required for scaffold erection and dismantling activities above six (6) feet.
- F. Scaffolds under erection or dismantling shall not be used, except where patching at tie-back locations is required during dismantling. Only the uppermost tie-back shall be removed at any one time, and only after the scaffold above the tieback has been removed.
- G. Mobile scaffolds (i.e. rolling scaffolds or Baker-type scaffolds) require that guardrails are installed when the working platform is equal to or greater than four (4) feet above the walking/working surface. Outriggers and bracing shall be provided in accordance with the manufacturer's instructions.
- H. Use of step-up type "mini" mobile scaffolds as work platforms is prohibited.
- I. Where scaffold platforms of any height are erected and used within fifteen (15) feet of an open edge, window, hole, or shaft regardless of the presence or non-presence of guardrails the platform must be equipped with guardrails or a personal fall arrest system must be used.

III. Mast-Climbing Scaffold

- A. Prior to installation of a mast-climbing scaffold, a review shall be conducted by a Commonwealth of Massachusetts-Registered Professional Engineer (PE). The review shall specifically include the foundation requirements and structural connection details. The Engineer's report shall be submitted to the General Contractor, scaffold erector, and project structural engineer for review.
- B. An erection, dismantling, and inspection plan shall be submitted to the General Contractor prior to erection of a mast-climbing scaffold. The plan shall include, at a minimum, the procedures required to erect/dismantle/inspect the scaffold, a list of the qualified



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individuals who will perform the work, a Crane Hoist Plan, and fall protection procedures to be employed.

- C. The designated operator(s) shall be trained in the use, daily inspection and maintenance, and emergency procedures associated with the operation of the mast-climbing scaffold. This training shall be conducted by the manufacturer or his designee, documented, and a copy shall be provided to the General Contractor upon completion. Untrained operators shall not operate the scaffold.
- D. Following erection or installation, the mast-climbing scaffold shall be inspected by the manufacturer or his designee and shall be documented. This inspection report shall be submitted to the General Contractor upon completion.
- E. During use of a mast climbing scaffold, guardrails shall be installed on all sides, including the front face. Where guardrails cannot be installed on the front face, manufacturer-supplied outriggers and planks shall be installed so that the opening between the structure and the platform does not exceed the maximum distance required by the manufacturer. Where the planks must be removed from the outriggers for the scaffold to ascend or descend (i.e. around the tiebacks), fall protection shall be used by the employees on the platform.
- F. Access to mast-climbing scaffolds, where the scaffold platform is equal to or greater than nineteen (19) inches above the landing level, shall consist of a fixed stair or ladder.

IV. Pre-Tubular Scaffold

- A. An erection plan and any supporting documents on floor loading capacity of the proposed scaffold site should be submitted to the Project Safety Manager and HUEHS Department as part of the proposed project work plan.
- B. Any proposed large multi-tier interior or exterior scaffolding site that is under 125 feet in height in which the scaffold is to be placed on other than solid ground or basement reinforced concrete floors should first be investigated by a PE to determine if the load capacity of the exterior surface or interior floor is capable of supporting the proposed scaffold and any additional weight of materials and equipment it will carry. The evaluation must contain a PE stamped approval. Existing prior documentation of PE stamped floor load capacities of the proposed scaffold site can be used in lieu of a new PE evaluation.
- C. Any exterior multi-tier scaffold systems that will be erected on a pitched or flat roof surface that is under 125 feet in height should first be investigated by a professional engineer to determine if the load capacity of the surface can support the proposed scaffold and any additional weight of materials and equipment it will carry. The evaluation must contain a PE stamped approval. Existing prior documentation of PE stamped floor load capacities of the proposed scaffold site can be used in lieu of a new PE evaluation.

V. Inspection

- A. The General Contractor shall develop and implement a scaffold inspection program, specific to the project that meets the requirements of this Exhibit including identification of inspection protocols for multi-trade scaffolds.
- B. A tag system shall be used for scaffolds erected, dismantled, and used on the project. The tag system shall use color-coded tags as follows:
 - 1. Where scaffolding is being erected or dismantled or is not otherwise 100% complete and ready to use, the tag color shall be RED, and shall denote that the scaffold is not safe to use.
 - 2. Where scaffolding is 100% complete and ready to use, the tag color shall be GREEN.



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3. Where special requirements are necessary for scaffold users, the tag color shall be **YELLOW**, and shall denote the special requirements (e.g. fall protection required on outriggers, etc.)
- C. An inspection tag shall be conspicuously posted at each access point onto the scaffold.
- D. Where scaffolding is erected on behalf of the General Contractor or other Contractor for use by other than the erector, the scaffold erector and the owner/renter of the scaffold shall conduct a complete and thorough inspection prior to allowing employees onto the scaffold. The inspection shall be documented, and both the erector and owner/renter shall certify by signature that the inspection has been completed.
- E. Where scaffolds are in use for periods exceeding thirty (30) days the scaffold owner/erector shall conduct complete and thorough inspections once per month. Monthly inspections shall be documented and submitted to the General Contractor.
- F. The Competent Person for each Contractor working on the completed scaffold shall conduct daily inspections of the scaffold prior to allowing any employee to use the scaffold. The Competent Person shall certify by signature, date, and company name that the inspection has been completed. The signature shall be clearly denoted on the inspection tag.
- G. Exterior installed Scaffolding shall be inspected after sustained winds of 45mph.

IV. References

- A. ANSI/SIA A92.9-1993, American National Standard for Mast-climbing Work Platforms
- B. 29 CFR 1910, Subpart D, Walking-working surfaces
- C. 29 CFR 1926, Subpart L, Scaffolds